

WHAT IS CLAIMED IS:

1. An electronic signature method comprising the steps of:

analyzing a target document to generate a representation having a structure;

generating an electronic signature from each structural element of the structure of the generated representation; and

concatenating the generated electronic signatures into a single signature corresponding to the structure of the generated representation.

2. An electronic signature method according to claim 1, further comprising the step of setting a level of attachment of electronic signatures to structural elements of the document, whereby precision of reliability judgment of a document with an electronic signature can be varied depending on the level.

3. An electronic signature method according to claim 1 or 2, wherein a rate of coincidence between the target document and the target document with an electronic signature is found from a rate of structural elements having authenticated electronic signatures to the whole structure.

4. A method according to claim 1, 2 or 3, wherein said concatenating step includes putting the generated electronic signatures in a row.

5. An electronic signature apparatus comprising:
means for analyzing a target document to generate a representation having a structure;

means for generating an electronic signature from each structural element of the structure of the generated representation; and

means for concatenating the generated electronic signatures into a single signature corresponding to the structure of the generated representation.

6. An electronic signature apparatus according to claim 5, wherein a level of attachment of electronic signatures to structural elements of the document can be

set by said means for generating an electronic signature, whereby precision of reliability judgement of a document with an electronic signature can be varied depending on the level.

7. An electronic signature apparatus according to
claim 5 or 6, wherein said means for concatenating puts the
generated electronic signatures in a row.

8. An electronic signature apparatus according to claim 5, 6 or 7, further comprising:

means for analyzing the structure of the target document to verify the target document having the generated electronic signature; and

means for analyzing each of the electronic signatures of the structural elements of the target document.

9. An electronic signature apparatus according to claim 8, wherein said means for analyzing the electronic signature determine a rate of coincidence between the target document and the target document with an electrical signature from a rate of structural elements having authenticated electronic signatures to the whole structure.

10. An electronic signature apparatus comprising:

an electronic signature generator including:

means for analyzing a target document to generate a representation having a structure;

means for generating an electronic signature from each structural element of the structure of the generated representation; and

means for concatenating the generated electronic signatures into a single signature corresponding to the structure of the generated representation; and

an electronic signature analyzer including:

means for analyzing a structure of the target document, having the generated electronic signatures, and

means for analyzing the added electronic signatures